

Claims

- [c1] A networked health-monitoring system comprising: a plurality of remote patient sites, each site including at least one display; a data management unit configured to facilitate collection of patient health-related data; a memory; and stored program instructions for generating health-monitoring related information on the display; and at least one central server connectable for communication with the data management units at the patient sites, wherein the system is configured to allow a patient at a remote patient site to control the display of health-monitoring related information on the display.
- [c2] The system of claim 1, further configured to allow the patient to control the display of health-monitoring related information using at least one menu.
- [c3] The system of claim 2, wherein the menu allows a patient to select any one of the operational modes from the set consisting of: a display mode for displaying relevant information; an input mode for providing information; and a communications mode for establishing a link with the central server.

- [c4] The system of claim 3, further comprising at least one health-monitoring device configured to monitor at least one patient health condition at least one remote patient site; and to communicate data related to the monitored condition to the central server.
- [c5] The system of claim 4, wherein the menu allows a patient to select a monitoring mode in which at least one of the health-monitoring devices is used.
- [c6] The system of claim 3, wherein the menu allows a patient to display messages or instructions from a health care professional.
- [c7] The system of claim 3, wherein the system is configured to enable the patient to respond to information on the display by using a cursor or other indicator positioned at a selected item.
- [c8] The system of claim 4, wherein at least one of the health-monitoring devices is one or more of the set consisting of a blood glucose monitor; a peak flow meter; a blood pressure monitor; a pulse monitor; and a body temperature monitor.
- [c9] The system of claim 4, wherein the data management unit facilitates collection of health-related data by receiving data related to the monitored condition from at

least one of the health-monitoring devices.

- [c10] The system of claim 1, wherein the data management unit is configured to facilitate collection of health-related data entered by a patient at the remote patient site using buttons, keys or switches.
- [c11] The system of claim 10, wherein the data management unit is physically separate from the display.
- [c12] The system of claim 4, wherein the memory and the display are in at least one of the health-monitoring devices.
- [c13] The system of claim 12, wherein the display is in a handheld device.
- [c14] The system of claim 13, wherein the handheld device is capable of displaying pictorial health-monitoring related information.
- [c15] The system of claim 14, wherein the handheld device is capable of displaying animated health-monitoring related information
- [c16] The system of claim 14, wherein the memory is a program cartridge.
- [c17] The system of claim 1, wherein the remote sites further include at least one personal computer connected to the

data management unit.

- [c18] The system of claim 2, wherein the system produces reports based on collected patient health-related data.
- [c19] The system of claim 18, wherein the reports are standardized.
- [c20] The system of claim 19, further configured to provide at least one health care professional, remotely located from the patient sites, with reports based on the patient health-related data collected at the remote patient sites.
- [c21] The system of claim 19, wherein the system is configured to allow a health care professional to select which of a plurality of standardized reports is produced.
- [c22] The system of claim 18, wherein the reports use graphs and/or icons.
- [c23] The system of claim 18, wherein the reports can be generated periodically.
- [c24] The system of claim 18, wherein the server can generate the report.
- [c25] The system of claim 18, wherein the system can also display at least one report on a display at a remote patient site.

- [c26] The system of claim 18, wherein the system can display statistical and/or trend information.
- [c27] The system of claim 26, wherein the system can display statistical or trend information to the patient.
- [c28] The system of claim 18, wherein the report includes information data for a period of time.
- [c29] The system of claim 1, wherein the system is configured to transmit at least one message for display on at least one display.
- [c30] The system of claim 29, wherein the message includes step-by-step instructions.
- [c31] The system of claim 29, wherein the message includes results of a test.
- [c32] The system of claim 29, wherein the message includes diagnostic information indicating whether a test has proceeded in a normal fashion.
- [c33] The system of claim 29, wherein the message is a multi-line message.
- [c34] The system of claim 29, wherein the message is a health care professional selected message.

- [c35] The system of claim 34, wherein the healthcare professional generates the selected message.
- [c36] The system of claim 29, wherein the message is educational or motivational.
- [c37] The system of claim 29, wherein the system is configured to transmit a message to a specific patient.
- [c38] The system of claim 37, wherein the system is configured to transmit the message automatically to the patient.
- [c39] The system of claim 37, wherein the system is configured to transmit the message to the patient when the patient chooses.
- [c40] The system of claim 39, wherein the message can be stored before being transmitted to the patient.
- [c41] The system of claim 1, wherein the system is configured to transmit programs, over the communication link, for storage in a memory and execution at a remote patient site.
- [c42] The system of claim 1, wherein the patient can indicate user experienced symptoms to the system.
- [c43] The system of claim 1, wherein the system can capture

quantitative measurements.

- [c44] The system of claim 43, wherein the system can capture medication data.
- [c45] The system of claim 1, wherein the collected patient health-related data includes time data.
- [c46] The system of claim 1, wherein the healthcare professional computer receives the report after transmitting an authorization code to the server that identifies an associated healthcare professional as an authorized user.
- [c47] A method of collecting and processing patient health-related data, comprising: at a plurality of remote patient sites, facilitating collection of patient health-related data using a data management unit; using stored program instructions to generate health-monitoring related information on at least one display; and collecting patient-health related data; connecting at least one central server for communication with the data management units at the patient sites; and allowing a patient at a remote patient site to control the display of health-monitoring related information on the display.
- [c48] The method of claim 47, wherein the patient controls the display of health-monitoring related information using at least one menu.

- [c49] The method of claim 48, wherein the menu allows a patient to select any one of the operational modes from the set consisting of: a display mode for displaying relevant information; an input mode for providing information; and a communications mode for establishing a link with the central server.
- [c50] The method of claim 49, further comprising using at least one health-monitoring device to monitor at least one patient health condition at least one remote patient site; and to communicate data related to the monitored condition to the central server.
- [c51] The method of claim 50, wherein the menu allows a patient to select a monitoring mode in which at least one of the health-monitoring devices is used.
- [c52] The method of claim 49, wherein the menu allows a patient to display messages or instructions from a health care professional.
- [c53] The method of claim 49, wherein the patient responds to information on the display by using a cursor or other indicator positioned at a selected item.
- [c54] The method of claim 50, wherein at least one health-monitoring device includes one or more of the set con-

sisting of a blood glucose monitor;a peak flow meter;a blood pressure monitor;a pulse monitor; and a body temperature monitor.

- [c55] The method of claim 50, wherein the data monitoring unit facilitates collection of health-related data by receiving data related to the monitored condition from at least one of the health-monitoring devices.
- [c56] The method of claim 47, wherein the data monitoring unit is configured to facilitate collection of health-related data entered by a patient at the remote patient site using buttons, keys or switches.
- [c57] The method of claim 56, wherein the data management unit is physically separate from the display.
- [c58] The method of claim 50, wherein the memory and the display are in at least one of the health-monitoring devices.
- [c59] The method of claim 58, wherein the display is in a handheld device.
- [c60] The method of claim 59, further comprising displaying pictorial health-monitoring related information on the handheld display.
- [c61] The method of claim 60, further comprising displaying

animated health-monitoring related information on the handheld display.

[c62] The method of claim 59, wherein the memory is a program cartridge.

[c63] The method of claim 47, further comprising connecting at least one personal computer to the data management unit.

[c64] The method of claim 47, further comprising generating at least one report based on collected patient health-related data.

[c65] The method of claim 64, wherein the report is standardized

[c66] The method of claim 65, further comprising providing at least one health care professional, remotely located from the patient sites, with reports based on the patient health-related data collected at the remote patient sites.

[c67] The method of claim 65, further comprising allowing a health care professional to select which of a plurality of standardized reports is produced.

[c68] The method of claim 64, wherein the report uses graphs and/or icons.

- [c69] The method of claim 64, wherein the report is generated periodically.
- [c70] The method of claim 64, further comprising displaying at least one report on a display at a remote patient site.
- [c71] The method of claim 64, further comprising displaying statistical and/or trend information.
- [c72] The method of claim 71, further comprising displaying statistical or trend information to the patient.
- [c73] The method of claim 64, wherein the report includes information data for a period of time.
- [c74] The method of claim 47, further comprising transmitting at least one message for display on at least one display.
- [c75] The method of claim 74, wherein the message includes step-by-step instructions.
- [c76] The method of claim 74, wherein the message includes results of a test.
- [c77] The method of claim 74, wherein the message includes diagnostic information indicating whether a test has proceeded in a normal fashion.
- [c78] The method of claim 74, wherein the message is a multi-line message.

- [c79] The method of claim 74, wherein the message is a health care professional selected message.
- [c80] The method of claim 79, wherein the healthcare professional generates the selected message.
- [c81] The method of claim 74, wherein the message is educational or motivational.
- [c82] The method of claim 74, further comprising transmitting the message to a specific patient.
- [c83] The method of claim 82, further comprising transmitting the message automatically to the patient.
- [c84] The method of claim 82, further comprising the message to the patient when the patient chooses.
- [c85] The method of claim 84, further comprising storing the message before transmitting it to the patient.
- [c86] The method of claim 47, further comprising providing programs from the server to a remote patient site; and—storing in a memory and executing the programs at the remote patient site.
- [c87] The method of claim 47, wherein the patient indicates user experienced symptoms to the system.

- [c88] The method of claim 47, further comprising capturing quantitative measurements.
- [c89] The method of claim 88, further comprising capturing medication data.
- [c90] The method of claim 47, wherein the collected patient health-related data includes time data.
- [c91] The method of claim 64, wherein the healthcare professional computer receives the report after transmitting an authorization code to the server that identifies an associated healthcare professional as an authorized user.
- [c92] A system for collecting and processing patient health-related data, comprising:
 - a plurality of remote patient sites each including, at least one display means;
 - a data management means for facilitating collection of patient health-related data;
 - a memory means;
 - and stored program instructions for generating health-monitoring related information on the display;
 - at least one central server means for communication with the data management means at each patient site;
 - and means for allowing a patient at a remote patient site to control the display of health-monitoring related information on the display.